## CLAIMS

What is claimed is:

1. A method for assigning an internal port address to uniquely identify a port associated with a routing processor of a network device associated with, and having a location within, a system, comprising:

allocating a location section of the internal port address corresponding to the location of the network device;

allocating a routing processor section of the internal port address corresponding to a routing processor associated with the routing processor; and

allocating a port section of the internal port address corresponding to the port.

2. The method of claim 1, wherein allocating a location section further comprises allocating a shelf section of the internal port address corresponding to the location of the network device within a shelf.

3. The method of claim 2, wherein

the network device is associated with at least one geographical locator indicator; and

the shelf section is derived from the geographical locator indicator.

4. The method of claim 1, wherein allocating a location section further comprises allocating a slot section of the internal port address corresponding to the location of the network device within a slot.

5. The method of claim 4, wherein the slot is located within a shelf.

6. The method of claim 4, wherein

the network device is associated with at least one geographical locator indicator; and

the shelf section is derived from the geographical locator indicator.

7. The method of claim 1, wherein

the routing processor is associated with a PCI slot ID; and

the routing processor section is derived from the PCI slot ID.

8. The method of claim 1, wherein the network device is a line card.

9. A method for mapping an internal port address comprising a location section, a routing processor section and a port section to a network protocol address, comprising:

mapping the location section to a first selected section of the network protocol address;

mapping the processor section to a second selected section of the network protocol address; and

mapping the port section to a third selected section of the network protocol address.

10. The method of claim 9, wherein the location section further comprises a shelf section and a slot section.

11. The method of claim 9, wherein the network protocol address is a Fibre Channel address comprising a Domain ID field, an Area ID field and a Port ID field.

12. The method of claim 11, wherein the first selected location corresponds to a selected portion of the Area ID field.

13. The method of claim 11, wherein the first selected location corresponds to a selected portion of the Area ID field and a selected portion of the Port ID field.

14. The method of claim 11, wherein the second selected location corresponds to a selected portion of the Area ID field.

15. The method of claim 11, wherein the second selected location corresponds to a selected portion of the Area ID field and a selected portion of the Port ID.

16. The method of claim 11, wherein the third selected location corresponds to a selected portion of the Port ID field.

17. A method of routing a data frame from a source device utilizing a first protocol over a network utilizing a second protocol to a target device port utilizing a third protocol and associated with an internal port address, comprising:

delivering the frame to the internal port address.

18. The method of claim 17, wherein the first protocol is a different protocol from the third protocol, further comprising:

translating the data frame from the first protocol to the third protocol.

19. The method of claim 17, wherein the first protocol is a different protocol from the second protocol, further comprising:

encapsulating the data frame over the second protocol;

transmitting the encapsulated data frame over the network; and

decapsulating the data frame.

20. The method of claim 19, wherein the first protocol is a different protocol from the third protocol, further comprising:

translating the data frame from the first protocol to the third protocol.